# Capital Improvements Plan 2015-2019 Implementation Plan Annual Assessment FEBRUARY, 2018

The Red Lodge City Council adopted a Capital Improvements Plan (CIP) on February 10, 2015 that identifies capital projects in excess of \$25,000 for wastewater, the cemetery, police, streets, the library, storm water, water, and parks. Included is a provision that an annual assessment be conducted of capital needs for incorporation in the City's annual budget and a complete update be conducted every five years.

This annual assessment includes two sections documented in this write-up as follows:

- 1. Status of Adopted 2015-2019 Projects. (Noted: order of projects is not necessarily their order of priority)
- 2. Financial Assessment Summary for Water and Sewer Projects.

# STATUS OF ADOPTED 2015-2019 PROJECTS

#### WASTEWATER:

#### **Completed Projects**

#### Sewer Jetter Truck

- Status: Purchased in 2015-2016 fiscal year.
- □ **Cost:** \$342,830. The City continues to make annual payments of \$68,567 against the five (5) year note; with three payments left inclusive of the 2017-2018 budget year payment.

#### Preliminary Engineering Report for Sewer Plant (PER)

- Status: Completed in 2015-2016 fiscal year.
- □ **Cost:** \$63,500. Budgeted \$80,000. Payment Complete.

#### **Sewer Inspection Camera**

- Status: Purchased in 2015-2016 fiscal year.
- **Cost:** \$97,595. Payment Complete.

#### Pending Projects

#### New Generator at Lift Stations (Originally a 2015 Project.)

- Cost: \$150,000. The sources of funding identified in the CIP include the State Revolving Loan Fund, USDA Rural Utility Service Loans and Grants, Treasure State Endowment Program (TSEPP Construction Grants and the Department of Natural Resource Conservation (DNRC) Renewable Resources Grant and Loan Program (RRGL) Construction Grant, financed and backed by the Equivalent Dwelling Unit (EDU) sewer rate adjustments.
- □ **Obligated:** \$0
- Rationale (from adopted CIP): Required by the Department of Environmental Quality (DEQ). Generator with automatic transfer switch that will initiate with loss of power, eliminating the need for manual attention by City personnel.
- Status: Portable generators are currently being used at two lift stations, one at the north end of Highway 212 at Two Mile Bridge Road and the other located at the Spires Subdivision. A standby generator is now planned to be included in the rehabilitation of the lift station in conjunction with the proposed Force Main Project precluding the need for one of the generators.
- □ **CIP Modifications:** Modified in 2017, reduced the cost to \$75,000 for a new generator at the Spires lift station and programed for 2020. Incorporated second generator with the Force Main Project.

## Install new Generator at Waste Water Treatment Plant (Originally a 2015 Project.)

- Cost: \$150,000 The sources of funding identified in the CIP include the State Revolving Loan Fund, USDA Rural Utility Service Loans and Grants, TSEP Construction Grants and DNRC's RRGL Construction Grants, financed and backed by the EDU sewer rate adjustments.
- **Obligated:** \$70,000. (for Variable Frequency Drives (VFD); not for generator)
- Rationale (from adopted CIP): Required by DEQ. Generator with automatic transfer switch that will initiate with loss of power, eliminating the need for manual attention by City personnel. 2017 update due to high cost of generator and opportunity for immediate benefit from VFDs, generator acquisition rescheduled to 2018-2019 in order to employ VFDs prior to year end 2017.
- Status: Have an old backup if power does go off; can do manual operation. VFDs in process of being installed with completion date anticipated by year end 2017.
- CIP Modifications: Modified in 2017, PER completed. Programed for 2019. Cost originally anticipated to be at or exceed \$150,000; however, with the installation of the VFDs, the cost of the generator is anticipated to be less than originally projected amount.

Force Main Project to Include New Alignment, Conversion of Existing Force Main to Gravity and Rehabilitation of Existing New Alignment (amended in 2016 & 2017 CIP Assessments, originally a 2015 Project.)

- Cost: \$1,033,600. The sources of funding identified in the CIP included the State Revolving Loan Fund, USDA Rural Development/Rural Utility Service Loans and Grants, TSEP Planning Grants, TSEP Construction Grants and DNRC's RRGL Planning and RRGL Construction Grants, financed and backed by the EDU sewer rate adjustments.
- **Obligated:** \$200,000. 2017-2018 budget, for the first loan payment.
- Rationale (from adopted CIP and 2016 modification): Existing 12" force main is 20+ years old and fails frequently. Approximately 6,000' of force main. The project will replace one of the City's lift stations, thereby reducing time spent by City crews on operations and maintenance measures inherent to a lift station.
- Status: The DEQ Permit (WPCSRF Program # C302224) was approved August 8, 2017; and on September 13, 2017, DEQ authorized awarding the contract to Missouri River Contractors, LLC. The project construction was kicked-off in the field mid-October 2017 beginning with the excavation of the pits necessary for the boring under the highway and Rock Creek. In addition, CIP Project 2015-6, North Sewer Force Main, would be converted into a gravity sewer main so that service can be maintained to the existing services using this line, and the lift station would be rehabilitated and updated.
- □ **CIP Modifications:** Modified in 2016 and 2017, combined with CIP Project 2015-6; the project funding will utilize a State Revolving Fund (SRF) loan financed and backed by Sewer Enterprise Funds.

#### **Implementation of PER Recommendations for Sewer Plant**

Cost: \$4,000,000. (amended in 2017 CIP Assessment, originally a 2015 Project.)

- **Obligated:** \$28,000, included in the FY2017 budget.
- Rationale (from adopted CIP): This project is Phase 2 outlined in the Wastewater Facility Plan, and will provide additional treatment of nitrates and phosphates to meet wastewater discharge requirements through land application. Project may include land application in the future based upon further study.
- Status: In progress / on-going. Optimization performed vis a vis a Rural Water Program training; our plant was a test case and as such the optimization was completed pro-bono. Projects to be identified per storm water sewer study, sewer inspection program, et al. Inflows and infiltration to be addressed as recommended in the PER. Replaced Helisieve in 2016-2017 fiscal year, cost \$13,000.
- CIP Modifications: Modified in 2016, spray irrigation determined, by the PER, that spray irrigation is not required/cost-effective. Alternative, identified by the PER, recommended optimization, on Page 77 of the PER notes, "Existing facility optimization consists of assessing all of the existing treatment measures and configuring them to produce the best quality effluent the facility is capable of. This would include minor improvements to each process and the calibration of all equipment and operating software to ensure data is being properly recorded. Optimization would also include the assessment and adjustment (as needed) of the facilities existing solar array." The solar array has not yet been adjusted.

#### WATER:

#### **Completed Projects**

#### **Replaced Generator at Water Treatment Plant**

**Cost:** \$63,855. The sources of funding identified in the CIP included the State Revolving Loan Fund, USDA Rural Utility Service Loans and Grants, TSEP Construction Grants, DNRC's RRGL Construction Grants and Loans, and the Water Resources Development Act Grants, financed and backed by the EDU water rate adjustments.

- **Obligated:** \$150,000
- □ Rationale (from adopted CIP): The generator is old and unable to start.
- **Status:** Delivered in January, with installation finalized in the Spring of 2017.
- □ **CIP Modifications:** Project finalized; and with cost savings due to improved buying opportunity.

#### Pending Projects

#### Install Pressure Reducing Valve on Broadway Avenue Near Robinson Lane (Originally a 2019 Project.)

- Cost: \$130,000. The sources of funding identified in the CIP include the State Revolving Loan Fund, USDA Rural Utility Service Loans and Grants, TSEP Construction Grants, DNRC's RRGL Construction Grants and Loans and the Water Resources Development Act Grants, financed and backed by the EDU water rate adjustments.
- **Obligated:** \$0
- □ **Rationale (from adopted CIP):** There is currently no valve located there. It would be extremely beneficial to the area to avoid damage to appliances or accidents involving burst pipes or conduits.

- **Status:** The specifications and costs to be finalized.
- CIP Modifications: Modified in 2016, as the water main in that area is 12", creating water pressure that can exceed plumbing code standards and that wastes water. The project could be affordable as a lower cost project. Modified in 2017, combined with the White Ave. project. Anticipate engineering and installation in the 2018-2019 fiscal year budget.

#### **Replace Pressure Reducing Valve on White Avenue**

(amended in 2017 CIP Assessment, originally a 2019 Project.)

- Cost: \$130,000. The sources of funding identified in the CIP include the State Revolving Loan Fund, USDA Rural Utility Service Loans and Grants, TSEP Construction Grants DNRC's RRGL Construction Grants and Loans and the Water Resources Development Act Grants, financed and backed by the EDU water rate adjustments.
- **Obligated:** \$0
- Rationale (from adopted CIP): This project will replace an old and deteriorated pressure-reducing valve thus increasing its reliability and decreasing the need for maintenance. Need to get the valve above ground into a building to eliminate the need to enter a confined space for routine maintenance/monitoring.
- **Status:** The specifications and costs to be finalized.
- CIP Modifications: Modified in 2016, moved to 2017 as a 16" line is transitioning to a 6" line, creating psi greater than 100, exceeding plumbing code standards and wasting water. The project should be affordable as a lower cost project. Modified in 2017, combined with Robinson Lane project.

<u>PROJECTS REALIGNMENT</u> – The following three projects are being revised and combined into one multi-phase project. The Engineer expects to have the design / cost evaluation processes finalized by February 2018. During the Fall of 2017, a small but critical segment of the Haggin Water line was replaced and re-connected in order to facilitate more consistent water flow vis a vis a looped line.

#### <u>Platt Avenue Rehabilitation, 14th Street – 16th Street, Connect Services to an Existing 8" Water Main</u> (amended in 2017 CIP Assessment, originally a 2019 Project.)

- Cost: \$50,000. The sources of funding identified in the CIP include the State Revolving Loan Fund, USDA Rural Utility Service Loans and Grants, TSEP Construction Grants, DNRC's RRGL Construction Grants and Loans and the Water Resources Development Act Grants, financed and backed by the EDU water rate adjustments.
- □ Obligated: \$0
- □ **Rationale (from adopted CIP):** This project will provide improved water pressure for the residences connected to the smaller mains.
- **Status:** To be combined into the Haggin Water Line project.
- □ **CIP Modifications:** To be revised vis a vis Engineering Analysis report at year end 2017.

#### Haggin Avenue Water Rehabilitation, 3rd St. to 16th St., Upgrade Water Main from 4" to 8" (originally a 2019 Project.)

- Cost: \$1,750,000. The sources of funding identified in the CIP include the State Revolving Loan Fund, USDA Rural Utility Service Loans and Grants, TSEP Construction Grants, DNRC's RRGL Construction Grants and Loans, and the Water Resources Development Act Grants, financed and backed by the EDU water rate adjustments.
- **Obligated:** \$145,000; included in the FY 2017 Water Enterprise Fund for engineering study.
- □ **Rationale (from adopted CIP):** This project will provide improved water pressure, fire flows and increase the reliability of the water main by installing new materials.
- □ Status: To be revised / updated vis a vis Engineering Analysis report at year end 2017.
- □ **CIP Modifications:** Moved to 2018 given integrity of existing main and recent failures.

Haggin Avenue Water Main Connection to Cooper Avenue and 2nd Street (amended in 2016 CIP Assessment, originally a 2019 Project.)

- Cost: \$1,080,000. The sources of funding identified in the CIP include the State Revolving Loan Fund, USDA Rural Utility Service Loans and Grants, TSEP Construction Grants, DNRC's RRGL Construction Grants and Loans, and the Water Resources Development Act Grants, financed and backed by the EDU water rate adjustments.
- Obligated: \$0
- □ **Rationale:** Extending the water main to a developable area will eventually result in revenues for the City and provide clean water to new development. The existing 4" water main is old and replacement is necessary.
- **Status:** To be revised / updated vis a vis Engineering Analysis report at year end 2017.
- CIP Modifications: Coordinate with project to reduce costs for street project. This is also now combined with the Platt Ave. Rehabilitation, Haggin Avenue Water Rehabilitation, and 3<sup>rd</sup> Street to 16<sup>th</sup> Street, Upgrade Water Main projects.

## **STORM WATER:**

#### Pending Project

#### Storm Water: Storm Water Master Plan (originally a 2017 Project.)

- Cost: \$90,300. The sources of funding identified in the CIP include an INTERCAP Loan, TSEP Planning Grant and DNRC RRGL Grants and Loans, financed and backed by the EDU sewer rate adjustments.
- **Obligated:** \$94,308.
- Rationale (from adopted CIP): Locations and extent of storm water facilities have never been fully documented nor has a master plan ever been completed for the City. A master plan would identify and prioritize storm water problems and provide a planning tool for future and existing development.
- Status: City engineer has prepared a task order for the scope of work. The task order was approved in September, 2017 and final grant funding in November, 2017. Field work began in November, 2017 with project completion in 2018.
- **CIP Modifications:** Maintain project for 2017/2018.

# STREETS:

#### Pending Projects

#### Rehabilitate Golf Course Streets (originally a 2016 Project.)

- Cost: \$1,250,000. The sources of funding identified in the CIP include an INTERCAP Loan repaid from the general fund, a USDA Rural Development/Community Facilities Loan or creation of a Special Improvements District. MCA 7-12-4401 authorizes the establishment of a street maintenance district and assessments against property owners for the costs.
- **Obligated:** \$0.
- Rationale (from adopted CIP): This project would resurface deteriorated streets with chip and scrub seal.
  Necessary to prevent further deterioration.
- **Status:** Council approved the hiring of the Missoula law firm Dorsey & Whitney, with lead attorneys

Dan Semmons and Courtney Ellis, as our Bond Counsel, S to move forward with the SID program.

□ **CIP Modifications:** Determine options for timing implementation. Barring any unforeseen circumstances, we anticipate a Bond Sale in the first quarter of 2018; and project completion around mid-year 2018.

#### Reconstruct Haggin Avenue, 1<sup>st</sup> Street to 17<sup>th</sup> Street (originally a 2019 Project.)

- Cost: \$4,012,500; \$3,748,535 if constructed with the Haggin Avenue Water Rehabilitation (3<sup>rd</sup> to 16<sup>th</sup> Street) project, as to be determined by the Storm Water Master Plan. The sources of funding identified in the CIP include an INTERCAP Loan and a USDA Rural Development/Community Facilities Loan.
- □ **Obligated:** \$0
- □ **Rationale (from adopted CIP):** Reconstruct to provide "complete street" section, including facilities for nonmotorized users. Includes one-half block of intersecting streets on both sides.
- Status: Pending.
- CIP Modifications: Move to 2018 given the integrity of existing main. Funding will need to be identified.
  Modified in 2017, combine with project 2019-7.

#### **CEMETERY:**

<u>**Completed Project</u>** (This project will now come under the jurisdiction of the newly formed Red Lodge Cemetery District.)</u>

#### New/Expanded Irrigation System (amended in 2016 CIP Assessment, originally a 2015 Project.)

- □ **Cost:** \$300,000. The sources of funding identified in the CIP include an INTERCAP Loan and a USDA Rural Development/Community Facilities Loan.
- **Obligated:** \$5,500.
- Rationale (from adopted CIP): This project would replace and expand the existing system and provide a more user-friendly system. Current system is very inefficient and requires frequent maintenance due to sand blocking the intake. Current system requires one-man full time for irrigation.

- Status: Land acquisition has been completed to permit finalization of the election planned by year end 2017.
- CIP Modifications: Modified in 2016 and again further refined in 2017, scope of project to define cost components to include well, pump and irrigation lines; additional costs of site acquisition incurred in 2017. This project will now come under the jurisdiction of the newly formed Red Lodge Cemetery District.

# POLICE:

### **Completed Project**

Building Roof Repair (originally a 2015 Project.)

- **Cost:** \$28,176.99.
- **Obligated:** \$28,000. Adopted FY 2016 /2017 City budget included \$28,000 from resort tax funds.
- □ **Rationale (from adopted CIP):** Roof on north side of building leaks.
- Status: Repairs completed Spring 2017.
- □ **CIP Modifications:** Completed project in FY 2017.

#### LIBRARY:

#### Pending Project

#### Add Vestibule to West Entrance (originally a 2016 Project.)

- Cost: \$200,000 approx. The primary funding source is an anonymous trust received by the library for purposes of an addition to the current facility and solely maintained by its trustee. As needed, the library board will utilize additional funds available in Account 2220, Library Special Fund and Account 101060, Library Cash Reserve Account.
- **Obligation:** \$0 from the City General Fund
- Rationale (from adopted CIP): Add vestibule to the west entrance to improve accessibility, public safety, and flow of patrons in and out of the building and to generally make the entrance more welcoming. The addition will enable 24-hour book return, improve flow in/out of Library and be handicap accessible.
- Status: To be completed in the summer of 2018 (to be funded directly from Library funds)
- □ .CIP Modifications: None.

#### PARKS:

#### **Completed Project**

Pool Rehabilitation and Engineering Analysis (amended in 2016 and 2017 CIP, originally a 2019 Project.)

- □ **Cost:** \$250,000 (may vary based upon option see below). The sources of funding identified in the CIP include the INTERCAP Loan and the USDA Rural Development/Community Facilities Loan.
- Obligated: \$10,000. Adopted FY 2017 budget includes \$10,000 from resort tax funds (Parks Board) for an Aquatics Facilities Evaluation Study Report. A supplemental grant of \$10,000 was received from Stillwater mine.
- Rationale (from adopted CIP): Rehabilitate pool at current location per the Comprehensive Parks Plan.
  Research liner rehabilitation options at existing locations.

- **Status:** Study report draft received October, 2017.
- CIP Modifications: Project scope expanded beyond a rehab or rebuild at existing location to include options to relocate pool to another site and consider expansion of services offered. Interstate Engineering was hired and has delivered a draft report.

#### **Lions Park Storage Addition**

- Cost: \$40,000. Funding sources identified for the construction project include the INTERCAP Loan and shared cost with the City by Red Lodge Ice of in-kind assistance with volunteers, the Farmers Market in the amount of \$100.00 and the Red Lodge Lions Club up to 10% of the project cost not to exceed \$1,000.00 per year for four years.
- **Obligated:** \$15,000.
- Rationale (from adopted CIP): This project is included in the adopted CIP under the Parks and Recreation Section referenced as the Lion's Den Building Rehab/Replacement along with other Lions Park projects referenced in the Comprehensive Parks Plan. It is now included in the current short-term (5-year) implementation plan. The Council voted in December, 2015 to coordinate with an architect to prepare bidready construction drawings based on an approved concept design plan of 708 square feet for storage for Red Lodge Ice, the Farmers Market and the Red Lodge Lions Club.
- Status: The bid came in higher than the budgeted cost. The architect reassessed the plans and it was determined to change the project scope. An INTERCAP Loan of \$40,000 has been approved and a portion of it has been used to purchase a pre-fab storage building which was received in the summer of 2017. A second pre-fab storage shelter (cost estimated at \$5,000) has been ordered for the Lions Club's equipment not housed in the existing shed, and is expected to arrive prior to year end 2017. With the addition of the second pre-fab unit, the project will be closed out and loan repaid.
- □ **CIP Modifications:** Modified in 2016 and in 2017

# 2015-2019 Capital Improvement Plan

Annual Assessment- Updated January 2018

Wastewater Storm		tormwater	ormwater Water			treets	
$\checkmark$	*Sewer Jetter Truck (15-16)	IP	*Stormwater Master Plan (17- 18)	$\checkmark$	Replace Generator at Water Treatment Plant (16-17)	IP	*Rehab Golf Course Streets (17-18)
$\checkmark$	PER for Wastewater Plant (15-16)			$\checkmark$	Replace segment of Haggin Water Line (17-18)	TD	Reconstruct Haggin Ave
$\checkmark$	VFD's for Wastewater Plant (17-18)			IP	*Engineer cost evaluation for Haggin Water Project (17-18)		
$\checkmark$	Sewer Pond Optimization			TD	Platt/ Haggin Water Line Project		
IP	* Forcemain Project (17-18)			TD	Install pressure reducing valve near Robinson Lane		
IP	*Implementation of PER - including sewer inspection camera (15-16)			TD	Replace Pressure reducing valve on White Ave		
TD	New Generator at Lift Station						
TD	New Generator at Wastewater Plant						

Cemetery		P	Police		Library		Parks	
TD	New/Expand Irrigation System	$\checkmark$	Building Roof Repair (16-17)	IP	Add vestibule to West entrance (17-18)	$\checkmark$	Pool Rehab & Engineering Analysis (17-18)	
						$\checkmark$	Lions Park Storage (17-18)	

$\checkmark$	Completed
IP	In Progress
TD	To Do

\*Outstanding Expenditures

# SECTION – 2

# FINANCIAL ASSESSMENT SUMMARY FOR WATER AND SEWER PROJECTS 2015

#### Water and Sewer Capital Projects

The following are the water and sewer capital projects identified in the Capital Improvements Plan, February 2015, and the basis for the water and sewer capital project surcharges recommended in the Water and Sewer Rate Study, March 2015 and implemented per Resolution 3386, June, 2015.

Water System Capital Projects

	Replace Generator at Water Plant	\$ 150,000
	Pressure Reducing Valve on Robinson Lane	\$ 130,000
	Pressure Reducing Valve on White Avenue	\$ 130,000
	Platt Avenue Water Main Rehabilitation	\$ 50,000
	Haggin Avenue Water Main Rehabilitation	\$ 2,565,000
	Haggin Avenue Water Main Extension	<u>\$ 1,080,000</u>
	TOTAL WATER	\$ 4,105,000
Sev	wer System Capital Projects	
	Wastewater Preliminary Engineering Report	\$ 100,000
	Wastewater Preliminary Engineering Report Purchase of Sewer Jetter Truck	\$ 100,000 \$ 275,000
	Purchase of Sewer Jetter Truck	\$ 275,000
	Purchase of Sewer Jetter Truck New Generators (2) at Lift Stations	\$ 275,000 \$ 150,000
	Purchase of Sewer Jetter Truck New Generators (2) at Lift Stations New Generator at Wastewater Treatment Lagoons	\$ 275,000 \$ 150,000 \$ 150,000
	Purchase of Sewer Jetter Truck New Generators (2) at Lift Stations New Generator at Wastewater Treatment Lagoons Siphon Under Rock Creek	\$ 275,000 \$ 150,000 \$ 150,000 \$ 1,600,000

#### TOTAL WATER AND SEWER \$11,357,000

Modifications in project scope, cost estimates and schedule for the 2015-2019 CIP Water and Sewer projects were documented in the 2016 Annual Assessment of the CIP, with further adjustments reflected in the 2017 & 2018 Annual Assessments.

The Capital Improvements Plan, the Water and Sewer Rate Study, Resolution 3386 and the 2016 Annual Assessment of the CIP can be found at the following link:

http://cityofredlodge.net/departments/public-works/

#### Equivalent Dwelling Unit (EDU) Capital Charges

Resolution 3386, To Set The Water And Sewer Rates And Charges For The City Of Red Lodge For The Next Five Years Effective On July 1, 2015, includes varying capital expenses per EDU for each of the next five years. This is in addition to the monthly service charge adjustments each year that are for the purpose of addressing operation and maintenance costs, establishing reserves to address aging and deterioration of system components, and servicing debt for previous capital improvement projects.

EDUs are calculated based upon the size of the water service line in that a ¾" water service is a typical residential water service and is considered to be 1 EDU. The EDUs for larger service lines are then calculated based on the cross-sectional area of the larger service divided by the cross-sectional area of a ¾" service. This results in 1.79 EDUs for a 1" line, 4.00 EDUs for a 1.5" line, 7.14 EDUs for a 2" line, 16 EDUs for a 3" line and 28.57 EDUs for a 4" line.

The following capital expenses per EDU have been assessed:

	<u>Water</u>	<u>Sewer</u>
July 1, 2015	0.00	10.82
July 1, 2016	2.81	13.55 (cumulative)
July 1, 2017	5.63 (cumulative)	16.28 (cumulative)
July 1, 2018	9.85 (cumulative)	20.38 (cumulative)
July 1, 2019	14.07 (cumulative)	24.48 (cumulative)

#### **Projected EDU Based Collections**

According to the Water and Sewer Rate Study, every dollar assessed as a capital project surcharge generates an estimated \$20,496 for the water enterprise fund and \$21,132 for the sewer enterprise fund. This proposed financing for the water and sewer projects identified in the CIP includes future anticipated debt for each enterprise fund.

On a yearly basis, the EDU capital surcharges are projected to generate the following amount of funds (collections summary starts in August given it takes one month for adjustments made on July 1 to be reported and 12 months for the yearly resultant amount):

#### Water

By August 1, 2016	0.00 EDU = \$0
By August 1, 2017	2.81 EDU x \$20,496 = \$ 57,594
By August 1, 2018	5.63 EDU x \$20,496 = \$115,393
By August 1, 2019	9.85 EDU x \$20,496 = \$201,886
By August 1, 2020	14.07 EDU x \$20,496 = \$288,379
Continuing yearly am	nount = \$288,379

#### Sewer

By August 1, 2016	10.82 EDU x \$21,132 = \$228,648
By August 1, 2017	13.55 EDU x \$21,132 = \$286,339
By August 1, 2018	16.28 EDU x \$21,132 = \$344,029
By August 1, 2019	20.38 EDU x \$21,132 = \$430,670
By August 1, 2020	24.48 EDU x \$21,132 = \$517,311

Continuing yearly amount = \$517,311

The continuing amount of yearly collections by August, 2020 per the EDU capital adjustment will be \$288,379 for water and \$517,311 for sewer, totaling \$805,690. As noted in the Water and Sewer Rate Study:

- □ The City will need to reevaluate the rate increases scheduled for 2018 and 2019 once more detailed funding packages and schedules are available for each project.
- □ The rates should be reviewed as part of the City's annual budget process.
- □ The rates should also be recalculated and the capital improvements surcharges reevaluated at the completion of any major milestones or large projects.

#### Water and Sewer Collections (August 2015 – November 2016)

Total water and sewer collections since the rate adjustment July 1, 2015 are included on the spreadsheet, attached. In sum, collections for the first year of rate adjustments produced an additional \$29,751 (3.8%) for water and an additional \$286,387 (54.1%) for sewer. The EDU capital collections portion was projected at \$0 for water (given no capital charge for the first year) and \$228,648 for sewer (given a 10.82 EDU capital charge). Additional collections for the second year of rate adjustments for the four months through November 2016 reflect the EDU adjustments made on July 1, 2016. The capital charges for the second year are projected to generate an additional \$57,594 for water and an additional \$286,338 for sewer.

# **Target Water and Sewer Rates**

Per Montana Code Annotated, the estimated impact of proposed rate increases must be calculated and evaluated to insure the rate increase is reasonable and just. The projected monthly water and sewer rates are calculated assuming 6,000 gallons of usage for a typical residential service as identified in the Water and Sewer Rate Study and Resolution 3386.

As referenced in the Water and Sewer Rate Study, the City is encouraged to explore available grant funding sources to help reduce the capital construction expenses as much as possible, although Red Lodge will not be eligible for many of these programs until the average user rate meets or exceeds the target rate. The target rate is used in most construction grants and is calculated based on a percentage of household income for each jurisdiction. A combined water and sewer target rate is typically used.

The average rate for Red Lodge water and sewer before the increases effective July 1, 2015, was 63.97. The current target rate is 96.51. Red Lodge will exceed the target rate with the increases effective July 1, 2018 when the rates will be 98.12. The following are the rates before and after rate adjustments, including the target rate:

	Pre-Increas	se July 1	July 1	July 1	July 1	July 1	current
	Rate	2015	2016	2017	2018	2019	target rate
Water	\$35.31	\$35.31	\$38.83	\$42.37	\$47.32	\$52.29	\$58.74
Sewer	<u>\$28.66</u>	\$39.48	\$42.78	\$46.10	\$50.79	\$55.50	\$37.7 <u>6</u>
Combined	\$63.97	\$74.79	\$81.61	\$88.46	\$98.12	\$107.79	\$96.51

		Water					Sewer		
2014/2015 2015/2016 2016/2017 2017/2018						2014/2015	2015/2016 2016/2017		2017/2018
	(pre-increase)	(v	vith rate increas	e)		(pre-increase)	()	vith rate increas	e)
August	\$95,108.21	\$94,034.82	\$110,506.90	\$111,065.77	August	\$45,990.80	\$76,855.63	\$86,680.32	\$89,928.8
September	\$109,058.72	\$98,451.62	\$119,580.38	\$116,316.87	September	\$42,442.47	\$77,622.92	\$88,204.71	\$98,356.5
October	\$71,202.03	\$96,457.68	\$94,629.99	\$105,498.97	October	\$44,008.55	\$78,840.11	\$82,312.81	\$88,626.8
November	\$57,922.44	\$64,785.16	\$66,106.16	\$73,711.45	November	\$41,201.09	\$66,007.96	\$70,300.91	\$77,550.1
December	\$62,223.29	\$54,891.20	\$62,224.23		December	\$47,470.08	\$65,893.92	\$71,063.74	
January	\$53,657.18	\$54,259.23	\$59,878.45		January	\$44,408.61	\$63,313.47	\$68,920.77	
February	\$54,620.33	\$57,195.58	\$63,618.96		February	\$45,034.34	\$66,690.85	\$69,853.67	
March	\$54,237.52	\$63,035.86	\$62,914.06		March	\$45,082.91	\$63,904.90	\$71,390.82	
April	\$54,750.29	\$56,067.17	\$58,662.01		April	\$43,985.93	\$65,277.21	\$67,761.09	
May	\$52,456.34	\$50,741.80	\$62,396.39		May	\$44,565.65	\$61,446.64	\$71,228.84	
June	\$55,371.93	\$60,286.05	\$65,396.21		June	\$43,809.16	\$69,621.64	\$73,588.06	
July	\$64,508.90	\$64,662.01	\$79,670.91		July	\$41,802.04	\$60,713.29	\$75,586.98	
Total	\$785,117.18	\$814,868.18	\$905,584.65		Total	\$529,801.63	\$816,188.54	\$896,892.72	
Change from	2014/2015 (YTD)	\$29,751.00	\$120,467.47		Change from	Change from 2014/2015 (YTD) \$286,386.91 \$367,091.09			
% change from	n 2014/2015 (YTD)	3.80%	18.95%		% change from 2014/2015 (YTD) 54.10% 77.74%				
culmat	ive change		\$150,218.47		culmative change \$653,478.00				
Projected annual	collections:				Projected annual	collections:			
EDU FY 2015-2016	capital adjustment =	\$20,496 x \$0 = \$	0		EDU FY 2015-2016	capital adjustment =	\$21,132 x \$10.8	2 = \$228,648.24	
EDU FY 2016-2017	capital adjustment =	\$20,496 x \$2.81	= \$57,593.76		EDU FY 2016-2017	capital adjustment =	\$21,132 x \$13.5	5 = \$286,338.60	
EDU FY 2017-2018	capital adjustment =	\$20,496 x \$5.63	= \$115,392.48		EDU FY 2017-2018	capital adjustment =	\$21,132 x \$16.2	8 = \$344,028.96	
EDU FY 2018-2019	capital adjustment=	\$20,496 x 9.85 =	\$201,885.60		EDU FY 2018-2019	EDU FY 2018-2019 capital adjustment= \$21,132 x \$20.38 = \$430,670.16			
EDU FY 2019-2020	capital adjustment=	\$20,496 x 14.07	= \$288,378.72		EDU FY 2018-2019 capital adjustment= \$21,132 x \$24.48 = \$517311.36				
NOTES:									
Collections for rate	adjustment made on Ju	ly 1, 2015 reported	first in the Augus	st billing.					
Total collections al	so include service/user	charge fees in ad	dition to the EDU	capital adjustment.					
A \$2 curb stop fee g	enerates an additional	\$2,800 - \$3,000 pe	r month that is no	t reflected in the collection	IS.				
Source: Total Water	Collections and Total S	ewer Collections	from monthly Clerl	k's report.					
Source: EDU capital	adjustments from the V	Vater and Sewer R	ate Study prepare	d by Great West Engineeri	ng.				